

REMARKS

The subject matter of claims 3 and 11 has been incorporated into claim 10.
Accordingly, claims 3 and 11 have been canceled.

Claims 32-34 have also been canceled.

Claim 4 has been amended in a non-limiting manner to delete the phrase
“polyoxyalkylene groups of the formulae.”

Other claims have been amended as appropriate so that they conform to claim 10 as amended.

Claims 4, 10, 12, 18, 19, 22-31 and 35-37 are currently pending.

The Office Action rejected claim 4 under 35 U.S.C. § 112, second paragraph.
Applicants respectfully submit that the above amendments to claim 4 have rendered this rejection moot, and that the rejection should be reconsidered and withdrawn.

The Office Action also rejected claims 3, 4, 10, 22-30 and 35-37 under 35 U.S.C. § 102 as anticipated by U.S. patent 4,822,852 (“Wittmann”). In view of the following comments, Applicants respectfully request reconsideration and withdrawal of this rejection.

The subject matter of claims 3 and 11 has been incorporated into claim 10. Because claim 11 was not rejected over Wittmann, Applicants respectfully submit that the rejection based upon Wittmann has been rendered moot and should be reconsidered and withdrawn. This is particularly true for claims 18, 19 and 27-31 which relate to emulsions.

Furthermore, Wittmann’s polymers contain oxygen (O_p), where $p = 0.1$. (See, col. 3, line 13). Thus, Wittmann’s polymers do not contain stoichiometric amounts of oxygen for any hypothetical alkoxylation groups, let alone sufficient oxygen for the **poly**alkoxylation

groups required by the present claims. For this reason as well, Wittmann's polymers neither teach nor suggest the claimed invention.

Moreover, Wittmann neither teaches nor suggests the required alkoxylation groups in sufficient specificity to anticipate or suggest the claimed invention. In other words, Wittmann does not disclose oxyethylene, oxypropylene and/or oxyisopropylene groups with sufficient specificity, particularly given that the value for oxygen in Wittmann's polymers is only 0.1.

Finally, Wittmann neither teaches nor suggests that the required []_z and []_w blocks are present, let alone present in the required ratios. For this additional reason, Wittmann neither teaches nor suggests the claimed invention.

For all of the above reasons, Applicants respectfully submit that Wittmann neither teaches nor suggests the claimed invention.

The Office Action also rejected the pending claims under 35 U.S.C. § 102 as anticipated by, and under the judicially created doctrine of obviousness-type double patenting as obvious over, several patents and patent applications owned by the assignee of the present application (collectively, "the L'Oréal patents"). All of these patents/patent applications disclose the same type of polymer (a PSPA-type copolymer). Because all of these rejections involve the same issue (that is, whether the disclosed PSPA-type copolymer anticipates or renders obvious the claimed alkoxylated, emulsifying copolymers), these rejections will be discussed together. In view of the following comments, Applicants respectfully request reconsideration and withdrawal of these rejections.

At page 4, last paragraph of the Office Action, it is stated that claim 4 is free of the L'Oréal patents because it relates to specific oxyalkylene groups. Applicants respectfully

submit that claim 10, which requires the presence of oxyalkylene groups selected from the group consisting of oxyethylene, oxypropylene, oxyisopropylene, and mixtures thereof, is also directed to specific oxyalkylene groups and, thus, is also free of the L'Oréal patents. For at least this reason, Applicants respectfully request reconsideration and withdrawal of the § 102 and double patenting rejections based on the L'Oréal patents.

Furthermore, the L'Oréal patents neither teach nor suggest providing PSPA-type copolymers having (1) the required alkoxylation groups; or (2) polyalkoxylation. For example, the L'Oréal patents do not teach or suggest polyalkoxylation with the required groups in an amount sufficient to provide the polymer with emulsifying activity. That is, nothing in the cited references would motivate one skilled in the art to modify PSPA-type copolymers by providing them with sufficient polyalkylation to provide them with emulsifying activity. For this reason as well, references disclosing PSPA-type copolymers cannot teach or suggest the claimed invention.

Finally, as indicated in Lu's previously submitted Rule 132 declaration, no structure or variable in PSPA-type copolymers corresponds to the required "R" or oxyalkylene group in the claimed copolymers. (Lu's Rule 132 declaration, par. 6).

Significantly, because the polymers in the cited references do not contain an "R" group (meaning that "w" is zero in the claimed formulae), the prior art polymers cannot satisfy the required z/w ratios which are all positive numbers.

This difference between the claimed polymers and the prior art polymers is further highlighted by the fact that the formula (I) polymers can be used as starting materials and combined with oxyalkylene groups to produce the claimed copolymers. (See, the present application at page 5, line 25 et seq.). (Lu's Rule 132 declaration, par. 6). Because the

formula (I) polymers can be used as starting materials and combined with oxyalkylene groups to produce the claimed copolymers, it follows that the formula (I) polymers do not contain the claimed "R" or oxyalkylene groups: if the formula (I) polymers and the claimed polymers were truly the same, no need would exist to modify the formula (I) polymers by adding oxyalkylene groups to them to obtain the claimed polymers. (Lu's Rule 132 declaration, par. 6).

Clearly, the disclosed polymers are different from the claimed polymers: the disclosed polymers differ from the claimed polymers both structurally (they do not contain an "R" group like the claimed polymers and they do not contain the specified alkoxylation groups/polyalkylation) and functionally (they do not possess emulsifying activity). No teaching, suggestion or motivation exists to fundamentally change the structure and function of the disclosed polymers in such a way to yield the claimed polymers.

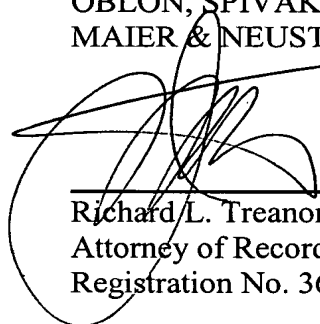
In view of the above, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 as well as the double patenting rejections.

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Applicants believe that the present application is in condition for allowance. Prompt and favorable consideration is earnestly solicited.

Respectfully submitted,

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